# Section 4: Response to Public Comment on Preliminary Draft Market Squid Fishery Management Plan

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## Section 4. Responses to Comments Regarding the Preliminary Draft Market Squid Fishery Management Plan

This section sets forth the California Department of Fish and Game (Department) responses to comments regarding the Preliminary Draft Market Squid Fishery Management Plan (Preliminary Draft MSFMP). The Preliminary Draft MSFMP was sent to interested parties and posted on the Department's web site for public review and comment on 15 May 2002. The Department accepted all written comments regarding the Preliminary Draft MSFMP that were received before 5:00 p.m., on 7 February 2003.

The responses to comments set forth below are intended to demonstrate the Department's consideration of all comments received regarding the proposed project and Preliminary Draft MSFMP. The Department's responses address all comments regarding the proposed project that provide recommendations to the Commission that are different from that of the Department. [CCR, Title 14, § 781.5(c)]. The Department prepared the following written responses guided by principles governing responses to comments under CEQA [Pub. Resources Code, § 21091 (d); CCR, Title 14, § 15088].

### 4.1 List of Comments Received on the Preliminary Draft of the MSFMP

A total of 30 letters, emails and oral comments were received by the Commission and Department relative to the Preliminary Draft MSFMP. Comments specifically addressing the proposed project represented 226 individual comments. The comments either supported or opposed one or more of the proposed alternatives or suggested alternatives for consideration. A summary of all of the communications received regarding the options is provided in Table 4-1.

Table 4-1. Comments received regarding the Preliminary Draft Market Squid Fishery Management Plan		
dated 15 May 2002. Comments are pro		
Name – Affiliation	Comment	
Anna Sardina, Monterey Fisher	Concerned about lightboats during daytime monopolizing squid to	
	get income when not necessary	
Anna Sardina, Monterey Fisher	Too many boats in Monterey Bay which is a very small area	
	(regional management)	
Anna Sardina, Monterey Fisher	Trip limits should be 30-40 tons	
Anna Sardina, Monterey Fisher	Limited Entry needs to have fewer boats resulting in better prices	
	and better squid quality	
Captain Thomas Noto, F/V Lady J	Wants sustainable fishery including an initial issuance criteria that	
(Monterey)	is closer to the goal of 52 vessels; regional management needs	
	to be explored	
Deborah Johnston, Pacific Grove	Squid vessels in Monterey should not be able to use lights	
Resident	because the shielded lights are visible one mile off shore at a	
	height of 500' above the shoreline	
Dominic Mineo, Monterey Fisher	Current close date lets in too many boats; need to go back to	
·	1995 and use historical data; newer permittees are ruining his	
	business	
Dominic Mineo, Monterey Fisher	\$2,500 permit fee is mistake	
Dominic Mineo, Monterey Fisher	Daily trip limit is too high at 60 tons; 50 ton is plenty	
Dominic Mineo, Monterey Fisher	Important not to take squid year round; need to establish	
•	seasons for northern and southern California fisheries (regional	
	management)	
Donald Brockman, Southern California	Need a capacity of 60-62 vessels to support processors	
Light Boat Operators		
Donald Brockman, Southern California	Limited Entry under the Sher Bill was considered as a method to	
Light Boat Operators	provide economic stability for market squid fishery	
Donald Brockman, Southern California	Split the seasonal landings catch limit rather than a statewide	
Light Boat Operators	seasonal limit to 115,000 tons south of Pt. Conception and	
	10,000 tons north of Pt. Conception	
Donald Brockman, Southern California	Majority of permit fees need to be put in a dedicated account to	
Light Boat Operators	market squid management and research	
Donald Brockman, Southern California	Daily trip limit if adopted needs to state that overage be paid to	
Light Boat Operators	DFG with no penalty for the fishers. Overages should fund scale	
'	monitoring at the docks.	
Donald Brockman, Southern California	Delay in adopting LE plan needs DFG to adopt transferability	
Light Boat Operators	options as an interim measurement	
Franco Sardina, Monterey Fisher	Control date is 20 months after the moratorium for the squid	
,	fishery was established; examine control date from Salmon and	
	Herring fisheries for consistency	
Franco Sardina, Monterey Fisher	Reduce trip limits but allow vessels to land higher limits as long	
r ranco cardina, ivioriterey i isilei	Treduce trip littits but allow vessels to larid higher littits as long	

Table 4.4. Comments manifed manager	and the Destining of Dest Market Could Fisher Manager at Disc
	ng the Preliminary Draft Market Squid Fishery Management Plan
dated 15 May 2002. Comments are pro	
Name – Affiliation	Comment control two parmits
France Conding Montages Fisher	as they hold two permits
Franco Sardina, Monterey Fisher	Need to restrict fishing in Monterey Bay to 12 hours per day to
	alleviate fishing pressure
Franco Sardina, Monterey Fisher	Gear restrictions need to include setting a maximum diameter of
	1" for purse and leaded lines to protect bottom habitat damage,
	especially egg cases
Franco Sardina, Monterey Fisher	Preferred option for initial issuance needs to be equal to the
Francis Occilias Mantagas Fisher	capacity goal (52 vessels)
Franco Sardina, Monterey Fisher	Regional management must be added to the plan and be
	Department's preferred option
Frank Bertoni F/V Santina	Would like LE initial issuance to allow him a permit to fish north of
	39 degree (he is only fisher in area) because he doesn't have
	enough landings to qualify
Franklin Gress, California Institute of	There are three species of cormorants that breed at the Channel
Environmental Studies	Islands not mentioned in the seabird section including a species
- II. O. O. III. II. III. I	of special concern
Franklin Gress, California Institute of	The management plan identifies the breeding period for the
Environmental Studies	California Brown Pelican from March through August - this
	species breeds from February through September, although
	breeding can start as early as January and extend through
	October
Franklin Gress, California Institute of	Continuous exposure to light alters endocrine levels and should
Environmental Studies	be considered as a factor in lowered productivity levels
Franklin Gress, California Institute of	The shielding and wattage restrictions are not of much value to
Environmental Studies	the birds and were only a "band-aid" type approach
Joe Alferi, San Diego Fisher	\$2,500 permit fee is not equitable among the users; need to add
	surcharge to equate fees based on the amount of resource
Las Alfani Can Diana Fiahan	harvested
Joe Alferi, San Diego Fisher	Supports DFGs preferred plan for qualifying foe permit
Joel Sohn, Fishery Biologist, Monterey	Preferred option for initial issuance needs to be equal to the
Fisher	capacity goal (52 vessels)
Joel Sohn, Fishery Biologist, Monterey	Regional management must be added to the plan and be DFGs
Fisher	preferred option
John Gingerich/Hueneme Fish	Man-made influences, specifically pollution, will cause fisheries
Processors	spawning to decline and need to be corrected before considering
Montanay Day National Manina	fishery management
Monterey Bay National Marine	Unsustainable annual harvest undermines the goal of ecosystem
Sanctuary Mantaray Ray National Marina	based management  Dearth of histograph information is a valid constraint and
Monterey Bay National Marine	Dearth of biological information is a valid constraint and
Sanctuary  Mantaray Ray National Marina	management must be precautionary
Monterey Bay National Marine	Need to consider a more representative data set than 3 years
Sanctuary	and the average be reduced by a percentage that reflects lack of reliable biomass estimate
Montoroy Ray National Marina	If variation in effort and market demand has been sufficient to
Monterey Bay National Marine	
Sanctuary	invalidate using the last 10 years, employ a CPUE analysis to
Montoroy Ray National Marina	arrive at a more accurate biomass estimate
Monterey Bay National Marine	If the seasonal catch limit is too high, then the economic
Sanctuary  Mantaray Ray National Marina	feasibility of the limited entry program is over inflated
Monterey Bay National Marine	Capacity needs to be reduced concomitant with seasonal catch
Sanctuary	limit

Table 4-1. Comments received regarding	ng the Preliminary Draft Market Squid Fishery Management Plan
dated 15 May 2002. Comments are pre	esented in no specific order.
Name – Affiliation	Comment
Orlando Amaroso, Southern California	Seasonal statewide catch limitation needs to be increased to
Commercial Fishing Association	allowance for north of Pt. Conception; current limit reflects only
	effort by the southern fishery
Orlando Amaroso, Southern California	SCCFA is considering a regional catch limitation but has not
Commercial Fishing Association	reached a consensus on subject
Orlando Amaroso, Southern California	Recommends 90 tons be set as a minimum; daily trip limits are a
Commercial Fishing Association	weak form of management
Orlando Amaroso, Southern California	Rather than daily trip limits, recommend a weekly or monthly limit
Commercial Fishing Association	based on the 90 ton daily trip limit
Orlando Amaroso, Southern California	Capacity goal of 52 vessels is appropriate for squid fishery and
Commercial Fishing Association	initial issuance needs to use this number rather than 74
Orlando Amaroso, Southern California	Grandfathering clause needs to be adjusted so that substantial
Commercial Fishing Association	historical participation is used a criterion
Orlando Amaroso, Southern California	DFG needs to establishing a LE with the number of permits
Commercial Fishing Association	issued at the capacity goal
Orlando Amaroso, Southern California	Request that Patty Wolf clarify policy regarding LE as an
Commercial Fishing Association	important factor for qualifying criteria
Orlando Amaroso, Southern California	Every purse seine owner should have the ability to use own light
Commercial Fishing Association	boat because light boat is a tender vessel (permitted or not)
Orlando Amaroso, Southern California	Although not currently an option, the SCCFA wants DFG to be
Commercial Fishing Association	aware that the San Pedro fleet cannot work with smaller nets
Orlando Amaroso, Southern California	Additional monies from daily trip limit overages should be used to
Commercial Fishing Association	offset permit fees incurred by the squid fishery
Pacific Seabird Group	Squid are vital to seabirds in the California Current System
Pacific Seabird Group	Seasonal landing limit cannot be equal to maximum landings
•	because assessment needs to take fluctuations into account
Pacific Seabird Group	Maximum seasonal landings should not be based on an
•	anomalous period; they occurred during a La Nina cold water
	event
Pacific Seabird Group	125,000 landings limit is not precautionary fishery management
	and invites ecological disaster
Pacific Seabird Group	Need to evaluate and discuss lower landings limit for ENSO in
	FMPS
Pacific Seabird Group	If a landings cap needs to be set, it needs to be based on long-
	term data that includes for El Nino and La Nina events and takes
	the requirements of ecologically dependent species into account
Pacific Seabird Group	Need to acknowledge that shields and reduced wattage must be
	evaluated and resources set aside to fund study
Pacific Seabird Group	Need to evaluate effects of lights on Ashy Storm-petrels on Santa
	Cruz
Pacific Seabird Group	Need to evaluate effects of lights on Snowy Plovers on Santa
	Rosa Island
Pacific Seabird Group	Recommend closure within one mile of seabird colonies during
1 domo odabila oroap	breeding season
Peer Review Panel	Plan does not adequately cover/treat the socioeconomics of the
I COLINGWI ALIGI	squid fishery
Peer Review Panel	Analysis is poorly developed; reasons for rejecting alternatives
I COLINGWI ALIGI	are unclear; catch limits need to be broken down by subfisheries
Poer Poviow Panel	
Peer Review Panel	Why set trip limits at 3x market levels?

	nts are presented in no specific order.
Name – Affiliation	Comment
Peer Review Panel	Supports weekend closures
Peer Review Panel	Need to include an observer program
Peer Review Panel	Continue evaluations in light of MPAs and seabird related
Peer Review Panel	closures
	Expand option to establish a permit for the taking of market squid as live bait
Peer Review Panel	Egg escapement seems appropriate for management of market squid
Peer Review Panel	Shortcoming includes no analysis of the Monterey spawning population
Peer Review Panel	Because of the limited number of squid that were assessed for the egg escapement method, need to closely monitor this method as a management tool
Peer Review Panel	Mortality estimates rely heavily on aging data which is questionable
Peer Review Panel	Disagrees that 3 years of high catch indicate that the stock is robust
Peer Review Panel	Have no population data to support that current levels of squid are not an anomaly
Peer Review Panel	Should have separate limits for northern and southern fisheries
Peer Review Panel	Need larger sample sizes
Peer Review Panel	Need to analyze major spawning grounds separately
Peer Review Panel	Supports DFG preferred alternative not to set aside specific areas
Peer Review Panel	Existing gear restrictions should be maintained
Peer Review Panel	Combining scientific, environmental and industry in one group may not provide enough expertise
Peer Review Panel	Boost sampling analysis and number of squid aged; ageing method may be inappropriate
Peer Review Panel	Concerned that statoliths reading technique is flawed
Peer Review Panel	Observer program is essential
Peer Review Panel	Format and peer review process need extensive changes
Peer Review Panel	Proposed option is risk-prone and inadequate and does not account for changes in ocean conditions
Peer Review Panel	Proposed option is risk-prone and inadequate and does not account for regional fishery differences
Peer Review Panel	Recommend that fixed annual quota be treated as a transitional management tool
Peer Review Panel	Annual quota needs to be split by region (north and south of Pt. Conception)
Peer Review Panel	Recommend transition from fixed limit to adaptive in-season management based on egg-escapement
Peer Review Panel	Current sampling for egg escapement is inadequate because it needs to be across the entire range of spawning sites (fishery and non-fishery)
Peer Review Panel	Recommend DFG explore alternatives such as smaller trip limits and time closures to meaningfully and equitably limit effort
Peer Review Panel	Trip limits need monitoring and enforcement costs evaluated
Peer Review Panel	Trip limit costs and benefits on fishery participants and

dated 15 May 2002. Comments are	·
Name – Affiliation	Comment
Door Dovinsy Donal	associated communities needs to be evaluated
Peer Review Panel	No evaluation of logbook data
Peer Review Panel	Separate research and management section
Peer Review Panel	Live bait logs need to be integrated into larger squid catcher vessel permitting system
Peer Review Panel	Capacity goal: catcher vessel capacity arguments are flawed
Peer Review Panel	Light boat capacity goal does not make sense because ratio (relationships) are much more complex
Peer Review Panel	Brail vessel capacity goal is not supported
Peer Review Panel	Increasing brail activity may increase amount and duration of light use
Peer Review Panel	Issuance confusing
Peer Review Panel	Permit transfers thresholds need to be fully justified and may have negative distributional consequences for small vessel owners
Peer Review Panel	Rationale for current light limitation (30,000 W) is lacking
Peer Review Panel	Other gear options are not considered (underwater lights)
Peer Review Panel	Ecological and socio-economic impacts of gear restrictions (wattage and shielding) need to be evaluated
Peer Review Panel	A preferred option needs to be specified, analyzed and justified
Peer Review Panel	No supporting analysis that advisory committee will not have socioeconomic effects (AE: need to state that they cannot be determined)
Peer Review Panel	Need to clarify role of advisory committee, publish and disseminate meeting minutes and consider indirect socioeconomic effects of the "no committee" option
Peer Review Panel	Need to be associated with research and monitoring sections
Peer Review Panel	Add a section to Chapter 3 discussing socio-economics of the squid fishery
Peer Review Panel	Would like to know how two squid committees and other participants feel about this capacity goal
Peer Review Panel	Need to revise socio-economic impact analysis to include 74+30 vessels
Peer Review Panel	Would like to know how squid committees and participants feel about "2 for 1" and "3 for 1" permit retirement program
Peer Review Panel	Economic treatment of daily trip limits is incorrect and inadequate (AE: Dr. Hackett provided details for proper economic analysis)
Point Reyes Bird Observatory	Importance of market squid as a year-round prey resource in the California Current System cannot be overstated
Point Reyes Bird Observatory	Seasonal landings limit is biased toward "La Nina event of the century (1999-2001)
Point Reyes Bird Observatory	Dangerous to believe that market squid can sustain this enormous take in years of more moderate environmental conditions
Point Reyes Bird Observatory	Draft does not consider environmental variability in depth
Point Reyes Bird Observatory	Did not consider recommendation of SRSC of 10,000 mt during ENSO
Point Reyes Bird Observatory	Seasonal catch limit appear to circumvent precautionary fisheries management by ignoring environmental variability

dated 15 May 2002. Comments are	
Name – Affiliation	Comment
Point Reyes Bird Observatory	Setting the cap at 125,000 tons is likely to lead to severe
D. i d D Divid Olivier de	overfishing of the stock and significant ecosystem consequences
Point Reyes Bird Observatory	El Nino's and La Nina's are part of a cycle in the CCS and should
	be appropriately considered as part of the historical catch for
D. '. ( D B'. ) Ol (	averaging
Point Reyes Bird Observatory	DFG needs to focus resources to get estimates of consumption
	because with these estimates the FMP is out of compliance with
Daint Davis - Dind Observations	the MLMA and fishery management acts
Point Reyes Bird Observatory	Gear restrictions have yet to be thoroughly investigated;
	resources need to be allocated to study the light pollution effects
D. '. ( D D'. ) Ol ( )	on seabird populations
Point Reyes Bird Observatory	Favor an option to close fishery within one-mile of all sensitive
	seabird-nesting habitats at CI (minimum January through
	October)
Point Reyes Bird Observatory	Recommend an observer program aboard vessels to further
D. '. ( D B'. ) Ol (	document take of marine birds and mammals
Point Reyes Bird Observatory	Support permit fees of \$2,500
Richard Parrish, NMFS	Plan is a fairly reasonable and fairly RISK PRONE management
Did to the state of the state o	strategy
Richard Parrish, NMFS	Plan assumes that historical fishing levels have not resulted in a
D. I. I.D I. NIMEO	decline in the squid populations
Richard Parrish, NMFS	Proposed regulations allow fishery to operate at near maximum
D	levels
Richard Parrish, NMFS	Regional management is completely lacking
Richard Parrish, NMFS	Southern California perspective dominates management plan
Richard Parrish, NMFS	Analysis supporting the 125,000 ton seasonal catch limit must
	include El Nino years to be consistent with Restrepo, et al.
Dishard Damish NMEC	(1998)
Richard Parrish, NMFS	Need regional catch limits because there is no evidence that the
	northern fishery could sustain landings > 6X maximum recorded
Dishard Darrick NMCC	landings
Richard Parrish, NMFS	Recommends that the northern fishery be capped at 15,000 tons
Dishard Darrick NMCC	which is not a conservative quota
Richard Parrish, NMFS	Present the LE program in a table with options
Richard Parrish, NMFS	LE Program needs to provide biological meaning
Richard Parrish, NMFS	Current LE program recommended will end up in worse situation
Dishard Dawish NIMEC	(bigger fleet)
Richard Parrish, NMFS	Proposed regulations provide no protection to the resource
Richard Parrish, NMFS	Plan needs to be broken down into two sections 1) conservation
Dishard Damish NBATO	implications and 2) socioeconomic implications
Richard Parrish, NMFS	No mechanism to insure fleet with ever reach stated goals
Richard Parrish, NMFS	30% escapement is risk prone because almost nothing is known
	about the underlying stock-recruitment relationship in market
District Desire APATO	squid and should not be used in an important forage species
Richard Parrish, NMFS	Managing the squid resource with a constant quota that cannot
	be attained during ENSO events is a risk-prone strategy
Richard Parrish, NMFS	125,000 seasonal catch limit only provides protection of the squi
	resource when the populations is large and healthy
Richard Parrish, NMFS	125,000 limit assumes that the squid population is able to recove

Table 4-1 Comments received recer	ding the Preliminary Draft Market Squid Fishery Management Plan
dated 15 May 2002. Comments are p	
Name – Affiliation	Comment
	from ENSO events within a few generations and will continue to
	do so
Richard Parrish, NMFS	Lack of ecosystem based considerations
Richard Parrish, NMFS	Squid resource needs to be balanced between a productive
·	sustainable fishery and the high populations levels that are
	necessary to provide forage for other species
Richard Parrish, NMFS	Not enough information to distinguish if there are two stocks; but
	even if just one stock, overfishing of either the summer or winter
	cohort would have adverse consequences
Richard Parrish, NMFS	Regional management might need to include closed periods for
	the northern and southern fisheries during the weaker off-season
	cohort (seasonal closures also suggested by A. Rosenberg)
Richard Parrish, NMFS	Constant escapement policies have not been successful (i.e.,
	groundfish fishery) because of underestimations of stock size or
	reproductive escapement
Richard Parrish, NMFS	SSB/R analyses are insufficient to determine escapement ratio
	necessary to maintain enough recruitment to sustain exploited
	population
Richard Parrish, NMFS	Capping yields at the maximum landings would only be
	appropriate if squid were NOT a major forage species
Richard Parrish, NMFS	30% escapement policy ignores any allowance for forage
Richard Parrish, NMFS	LE sections provides no information on spatial distribution of
	effort or the fleet
Richard Parrish, NMFS	FMP ignores the area north of Monterey fishing grounds as an
	area to potentially develop a squid fishery; a no limited entry area
	should be developed north of Ano Nuevo and a small quota
	should be established (i.e., 5000 tons)
Richard Parrish, NMFS	No option to enact stated goals of 52 roundhaul vessels, 52
	lightboats and 18 brail boats; no stated mechanism to get to
	these goals
Richard Parrish, NMFS	Need option for commission to set fleet at proposed goal
Richard Parrish, NMFS	Need options for commission to set fleet at a higher number of
	vessels with options that will reduce fleet size within a reasonable
	time
Richard Parrish, NMFS	Grandfather clause needs to state that nontransferable permits
	will go to fisherman who owned the vessel when the landings
	were made
Richard Parrish, NMFS	Preferred limited entry plan may put some fulltime fishers at a
B	severe economic disadvantage
Richard Parrish, NMFS	No information given on the size of the smaller boats that would
D: 1 1 D : : : : : : : : : : : : : : : :	be included in the limited entry fleet
Richard Parrish, NMFS	If fleet size needs to start at 52 with daily trip limit (60 tons) then
District Desire Andro	transferability to a larger vessel is a moot point
Richard Parrish, NMFS	Permit fee needs to be correlated to program costs divided by
	number of vessels issued permits (smaller fleet = higher fee;
District Desire Andro	larger fleet = lower fee)
Richard Parrish, NMFS	Statewide quota needs regional quota caps for north of Ano
	Nuevo, Ano Nuevo to Pt. Conception and south of Point
B. I. I. B. I. I. M. I. I.	Conception
Richard Parrish, NMFS	Supports weekend closures

dated 15 May 2002. Comments are p	·
Name – Affiliation	Comment
Richard Parrish, NMFS	Need immediate evaluation of adult squid biomass based on egg
	escapement method (AE: would be theoretical only)
Richard Parrish, NMFS	Put in place a escapement threshold of 60% until enough
	information is available to determine squid S-R relationship
Richard Parrish, NMFS	Re-examine MPAs resulting from Department stakeholder
	meetings under MLMA
Richard Parrish, NMFS	Re-examine seabird issue resulting from Department stakeholder
	meetings under MLMA
Richard Parrish, NMFS	Supports non-transferable grandfather permits to allow fleet to
	eventually reach stated goal
Sal Mineo, Monterey Fisher	Preferred option for initial issuance needs to be equal to the
	capacity goal (52 vessels)
Sal Mineo, Monterey Fisher	Regional management must be added to the plan and be DFGs
	preferred option
The Ocean Conservancy and NRDC	Priority should be year-round closures of areas identified for
	seabird conservation
The Ocean Conservancy and NRDC	Need to include more northern areas such as Big Sur and areas
-	north of San Francisco
The Ocean Conservancy and NRDC	Need to consider ecological considerations including squid as a
-	prey source
The Ocean Conservancy and NRDC	3-year average of historical catch not long enough time frame;
•	need to consider 5, 10 and 20 years
The Ocean Conservancy and NRDC	Need to consider El Nino conditions consistent with Option A4
•	(catch limit is reduced during ENSO periods)
The Ocean Conservancy and NRDC	Add an alternative option, set at a limit to reduce annual
•	fluctuations in squid catch
The Ocean Conservancy and NRDC	Need to consider regional catch limits to avoid serial depletion -
	set split at Point Conception
The Ocean Conservancy and NRDC	Incorporate broader range for daily trip limits that would have
	significant effect on avoiding the buildup of excess capacity
The Ocean Conservancy and NRDC	Consider and adopt a restricted access alternative that starts
	closer to and moves faster towards capacity goal
The Ocean Conservancy and NRDC	Urge precautionary approach because of level of uncertainty for
-	squid
The Ocean Conservancy and NRDC	Analyze cumulative effects of all measures
The Ocean Conservancy and NRDC	Seasonal landing limit equal to highest catches is risky measure
The Ocean Conservancy and NRDC	Plan needs to consider the importance of squid in the coastal
·	food web
The Ocean Conservancy and NRDC	To sustain the fishery from a socio-economic view, need to
•	create a buffer of a population of squid stays off-limits to fishing
The Ocean Conservancy and NRDC	To sustain the fishery socio-economically, suggest lower caps to
,	provide greater stability from year-to-year
The Ocean Conservancy and NRDC	From a socio-economic view, consideration needs to be given to
, , , , , , , , , , , , , , , , , , , ,	how fishers will make a living during low-catch years
The Ocean Conservancy and NRDC	Need to decide which type of fishing we want to support - either
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	long-standing squid fishing communities or newer members of the
	squid fishery (both in and out of state)
The Ocean Conservancy and NRDC	Need to consider recreation value of maintaining abundant squid
	populations for predators at coastal communities that rely on

dated 15 May 2002. Comments are property Name – Affiliation	Comment
Twitte / trination	tourism
The Ocean Conservancy and NRDC	Restrepo et al. (1998) guidelines state that it is necessary to use historical rather than recent average catch
The Ocean Conservancy and NRDC	Regional management needs to be considered for the squid fishery
The Ocean Conservancy and NRDC	Options for daily trip limits would have minimal impact on current fishing practices and may actually increase landings
The Ocean Conservancy and NRDC	Supports the continuation of weekend closures but may only increase egg output by 4%
The Ocean Conservancy and NRDC	Need to consider harvest reserve areas that also protect Xantus's murrelets
The Ocean Conservancy and NRDC	Need to strengthen mechanisms to get to capacity goal
The Ocean Conservancy and NRDC	Need to include members of the conservation community and other members of the general public
The Ocean Conservancy and NRDC	Landing limit and 30% egg escapement is not "precautionary" because 30% egg escapement does not guarantee sustainability
The Ocean Conservancy and NRDC	Need to include section on value of squid as prey in marine mammal and bird sections
The Ocean Conservancy and NRDC	Need to include costs for implementing management measures
The Ocean Conservancy and NRDC	Need to include types of actions as done in the NFMP
Thomas Noto, Monterey Fisher	Preferred option for initial issuance needs to be equal to the capacity goal (52 vessels)
Thomas Noto, Monterey Fisher	Regional management must be added to the plan and be DFGs preferred option
US Fish and Wildlife Service	Need to avoid affecting brown pelicans and other seabirds during their breeding season from 1 Feb through 20 August around SBI/Anacapa
US Fish and Wildlife Service	Recommend observer program to document the effects of squid fishery on seabirds
US Fish and Wildlife Service	Need an analysis of removing 125,000 tons of squid from the marine environment
US Fish and Wildlife Service	Juvenile bald eagles will be released on Santa Cruz and need to consider their prey that consume squid, effects of noise and light on birds and measures to reduce these effects
US Fish and Wildlife Service	Need to address impacts of squid fishery on Western Snowy Plover population on Santa Rosa
US Fish and Wildlife Service	Need to include a quantitative analysis of night lighting
William Gilly, Squid Biologist	Supports the need for a scientifically sound monitoring program to quantify effects of lights and noise on bird species in question
William Gilly, Squid Biologist	Landings for the northern fishery indicate a declining fishery since the 82-83 ENSO
William Gilly, Squid Biologist	Seasonal catch limit needs to northern and southern guideline if two different populations of squid are proved
William Gilly, Squid Biologist	Current seasonal catch limit encourages overfishing in Monterey Bay, especially in years with substantially reduced landings in the southern fishery
William Gilly, Squid Biologist	Separate seasonal catch limits between the northern and southern fisheries would prevent location overfishing in critical spawning area of southern Monterey Bay

Table 4-1. Comments received regarding the Preliminary Draft Market Squid Fishery Management Plan dated 15 May 2002. Comments are presented in no specific order.	
Name – Affiliation	Comment
William Gilly, Squid Biologist	Bimodal landings pattern needs to be reconciled with market squid lifespan
William Gilly, Squid Biologist	The 125,000 seasonal catch limit is based on a lack of knowledge about critical factors such as migration and spawning areas and should be reevaluated
William Gilly, Squid Biologist	It would be appropriate to set a special harvest allocation for the northern fishery
William Gilly, Squid Biologist	125,000 catch limit would be substantially lower if based on longer-term averages
William Gilly, Squid Biologist	There is no reason to assume that the 125,000 seasonal landings will continue indefinitely
William Gilly, Squid Biologist	It is scientifically unjustified to exclude ENSO from averages for the purposes of a setting an allowable harvest
William Gilly, Squid Biologist	Indirect ecological effects merit a more conservative seasonal catch limit (importance as forage)
William Gilly, Squid Biologist	Oversight in draft not to estimate amount of squid needed as forage; oversight could be challenged as failure to comply with existing state and federal mandates to consider indirect ecological effects
William Gilly, Squid Biologist	Preferred option for initial issuance needs to be equal to the capacity goal (52 vessels)
William Gilly, Squid Biologist	Regional management must be added to the plan and be DFGs preferred option

### 4.2 Department Response to Comments on Preliminary Draft MSFMP

Because several comments repeated the same issues, the responses to comments are grouped by like issues and concerns.

#### 4.2.1 Option A. Establish a Seasonal Catch Limitation

**Comment A1:** There should be separate seasonal catch limitations for the different geographic regions (northern and southern fisheries).

Response A1: In answer to this concern, the Department added an alternative (Option A.3) to evaluate regional catch limits. The Department concluded that establishing separate regional catch limits is not warranted at this time for two reasons. First, the smaller fishery in the northern region is not preempted by the catch in the southern region. The northern fishery typically harvests squid from April through September while the southern fishery does not begin catching squid until October. Because the squid season begins 1 April, the northern (smaller) fishery would not be impacted by a statewide quota. The second reason not to establish regional catch limits is that, from a biological perspective, squid harvested in the northern and southern fisheries are identical. The lengths, weights and sex ratios are similar between regions. Although spawning peaks at different times of the year for these regions, the temperature and depth of egg deposition is comparable between regions. If additional biological evidence indicates that there are two distinct biological stocks of squid, regional landings catch limits should be revisited.

**Comment A2:** Need to consider environmental conditions when setting a catch limitation such as during an El Niño event when squid availability to the fishery is limited.

Response A2: The Department agrees that it would be ideal to base the catch limit on environmental conditions (i.e., El Niño) to prevent overfishing when squid abundance is unknown (Option A.4). However, environmental conditions are near-impossible to predict as well as their effects on living marine populations. El Niño Southern Oscillations (ENSO) events are a highly variable phenomenon, lasting from 12-18 months and the time between events ranges from two to seven years. In addition, the strength of the warming events varies greatly from event to event. Limiting the fishery based on an unpredictable phenomenon would likely have no impact on the resource because of the low availability of squid significantly reduces fishing effort.

**Comment A3:** Need to include El Niño events when averaging recent catch history because they are a normal occurrence in the California Current System.

**Response A3:** The Department agrees and El Niño events were included when recent catch was averaged for Option A.

**Comment A4:** Using a constant quota is a risk-prone strategy because it assumes squid are able to recover quickly from El Niño events.

Response A4: The Department disagrees that this is a risk-prone strategy and believes that this is a risk-neutral approach when combined with monitoring the fishery through the egg escapement method (Option B.1 and B.2). In addition, historical catch records indicate that the season following an El Niño event has sufficient squid available for harvest. This is likely due to market squid's short lifespan (approximately six months) combined with several cohorts being present throughout the season.

**Comment A5:** Three years of catch history is not long enough to base seasonal catch limitations.

Response A5: The ability of the California market squid fishery to support landings of greater than 100,000 tons in the 1999-2000 season with repeat landings of the same magnitude in the following two seasons suggests that the stock is robust enough to withstand these levels of landings. This is likely due to the semiannual lifespan and the presence of several (minimum seven) cohorts throughout the year. The short lifespan of market squid (approximately six months) coupled with the existence of multiple cohorts within a year intimates that the spawning biomass undergoes continuous recruitment. Further, with the passage of Senate Bill 364 (effective April 1998) the number of participants in the fishery has increased concomitantly with landings. The last three years are representative of the current fleet's social and economic activities.

**Comment A6:** There is limited information about the market squid population, migration and egg production to set the statewide catch limit at the highest average catch.

**ResponseA6:** The Department agrees and has continued to contract with National Marine Fisheries Service to work on this matter as well as conduct further collaborative research on market squid biology, including egg production and migration.

**Comment A7:** Statewide catch limit is not conservative and needs to account for environmental fluctuations; catch limit should not be set at highest average catch.

**Response A7:** The Department believes that for market squid, the statewide catch limit in the proposed project is a risk-neutral approach when combine with monitoring the fishery through the egg escapement method (Option B.1 and B.2). In addition, historical catch records indicate that the season following an El Niño event has sufficient squid available for harvest. This is likely due to market squid's short lifespan (approximately six months) combined with several cohorts being present throughout the season.

**Comment A8:** Need to consider ecological effects of harvesting squid. Squid is a prey resource for numerous marine species and seabirds. The plan needs to get estimates of consumption for these species to comply with MLMA.

**Response A8:** Dr. William Gilly estimated that three species (California sea lion, Dall's porpoise and Risso's dolphin) alone consume 125,000 tons of market squid annually. The Department acknowledges that squid is an important source of prey for these species; however, estimates of consumption are highly variable and consumption information would be less than meaningful.

**Comment A9:** How will the fishers make a living during the off-years for market squid? Lowering the seasonal catch limit would likely make the market squid fishery more stable.

**Response A9:** The fishers have had to contend with off-years of market squid availability to the fishery since the fishery began in the 1800's. The market squid fishery is closely tied to California's wetfish fishery (sardine, anchovy and mackerel). Fishers will participate in these fisheries in addition to tuna and herring based on species availability and economics. Further, lowering the seasonal catch limit is not likely to lead to a more stable fishery because of the short lifespan of market squid.

Comment A10: Recommend adaptive in-season instead of fixed management.

**Response A10:** At this time, there is no way to manage the fishery in real-time. However, it is expected that the egg escapement method to monitor the squid fishery may lead to in-season management in the future.

**Comment A11:** Employ a CPUE analysis to arrive at a more accurate biomass estimate.

**Response A11:** A Catch-per-unit-effort has been attempted for the market squid fishery with little success (Maxwell, 2001) because effort appears more closely related to market squid orders than to market squid abundance.

**Comment A12:** Use fixed management only as transitional management tool.

**Response A12:** Management measures presented in this fishery management plan are subject to change as better methods to manage the fishery are revealed.

### 3.2.2 Option B. Egg Escapement Method to Monitor Squid Fishery

**Comment B1:** Need to add in analysis of Monterey spawning population and analyze major spawning grounds separately.

**Response B1:** The Department agrees. Efforts to collect prespawning squid in Monterey have been unsuccessful to date, but are planned again for the coming spawning season.

**Comment B2:** Increase escapement threshold to 60%; the escapement threshold is risk-prone because little is known about stock-recruitment relationship.

**Response B2:** The current rate of 30% was recommended by the Coastal Pelagic Species Management Team (CPS MT) and approved by the Pacific Fishery Management Council (PFMC). It was selected for the following reasons:

- 1. A reproductive escapement threshold of roughly 0.4 (40%) has been used effectively in other squid fisheries (e.g., Falkland Islands fishery)—keeping in mind that the Falkland Island fishery harvests primarily juveniles;
- 2. Not all of the squid spawning grounds off the California coast are subject to fishing pressure;
- 3. An existing weekend closure allows two days per week for spawning in the absence of fishing; and
- 4. The daily mortality of females during spawning is likely quite high.

**Comment B3:** Constant escapement policies have not been successful because of underestimations of stock size or reproductive escapement.

**Response B3:** Although the use of a constant escapement value has been used successfully in another squid fisheries (e.g., *Loligo gahi* - 40%), the egg escapement method will be evaluated regularly by the Department

**Comment B4:** Need to increase the escapement value to allow for forage.

**Response B4:** Because not all of the squid spawning grounds off the California coast are subject to fishing pressure, adequate forage should be provided. Further, the daily mortality of the spawning squid that are harvested is likely quite high so their value as live forage is limited.

**Comment B5:** Need immediate evaluation of adult squid biomass using egg escapement method.

**Response B5:** The Department is actively evaluating the egg escapement method in relation to the adult squid biomass.

**Comment B6:** Spawning Stock Biomass per Recruit (SSB/R) analyses are insufficient to determine escapement ratio necessary to maintain recruitment to sustain exploited population.

**Response B6:** Comment noted and will be referred to CPS MT and group working on evaluating egg escapement threshold in terms of the squid population.

### 4.2.3 Option C. Daily Trip Limit for Vessels Landings Squid

**Comment C1:** The Department should decrease daily trip limit to a lower value (30-40 tons, 50 tons).

**Response C1:** The Department disagrees. A seasonal catch limit (option A.2) and a restricted access program (option H.2) should serve to disseminate the fishery resulting in reduced fishing effort on specific spawning aggregations and locations, eliminating any impacts to the resource. Currently, the majority of landings are limited by market orders, however, if either market squid vessels or brail vessels improve their harvesting capability using enhanced technology or other means, establishing a daily trip limit should be reviewed.

**Comment C2:** Should increase daily trip limits to 90 ton minimum.

**Response C2:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

**Comment C3:** Rather than create daily trip limits, recommend weekly or monthly limit (based on 90 ton daily limit).

**Response C3:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

**Comment C4:** Daily trip limits need monitoring and enforcement costs evaluated.

**Response C4:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

**Comment C5:** Trip limits need cost/benefit analysis for fishery participants and communities.

**Response C5:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

**Comment C6:** Why set trip limits to three times market levels?

**Response C6:** One vessel may have market orders for several processors and will deliver to more than one market each day. The reason for the trip limit option was to prevent expansion beyond current fishery efforts.

**Comment C7:** The economic analysis is incorrect and inadequate because it assumes that the overage will be forfeited, however, it should result in increased number of trips.

**Response C7:** The Department agrees. Daily trip limits might require additional trips to obtain the seasonal catch limit and result in additional overhead expense to the vessel owner (e.g., fuel, provisions). However, since the best estimates of vessel expenses are proportional to catch, it is difficult to estimate the expense of additional trips since only a proportion of the total catch would be from the difference. For that reason, the Department analyzed the economic cost as revenue lost. Finally, these values should not be significant to the fishery.

**Comment C8:** Need to state trip limit overage paid to DFG with no penalty to fishers (funds should go to scale monitoring at docks).

**Response C8:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

**Comment C9:** If fleet starts at 52 with 60 ton daily limit than transferability to a larger vessel is a moot point.

**Response C9:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

**Comment C10:** The management plan should decrease trip limits but allow for higher limits if have possession of two permits.

**Response C10:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

**Comment C11:** Using a broader range for daily trip limits will help avoid buildup of excess capacity.

**Response C11:** Comment noted. Although the Department chose not to recommend daily trip limits in the proposed project, an alternative for a broader range (30-137.8 tons) has been presented in the revised draft MSFMP.

**Comment C11:** Daily trip limits would have little impact on current fishing practices and may negatively impact resource.

Response C12: The Department agrees that daily trip limits would have little impact on current fishing practices because the current fishery is subject to daily market orders, which are usually on the order of 30 tons. The Department chose not to recommend daily trip limits in the proposed project. If daily trip limits are not established and market conditions changed, fishing effort could disproportionately target individual cohorts. No biological data are available to determine the effects of increased pressure

on certain cohorts, however, the Department recommends revisiting this option if current fishing practices change.

### 4.2.4 Option D. Weekend Closure for Commercial Market Squid Fishery

**Comment D1:** Supports weekend closures but they may only increase egg output by 4%.

**Response D1:** Comment noted. Weekend egg production is not part of the method to evaluate the egg escapement threshold.

### 4.2.5 Option E. Monitoring Programs

**Comment E1:** The Preliminary Draft Plan has no evaluation of logbook data.

**Response E1:** Logbooks are relatively new for the fishery. Preliminary analysis has been started, but they are highly preliminary and have not been verified in any way (see Table 3-8 in Section 1). The squid fishery is unique in that effort for two vessels needs to be evaluated. Different methods are presently being assessed.

**Comment E2:** It is recommended that the research and management sections be presented separately.

**Response E2:** The Department agrees. Option D now deals with ongoing monitoring efforts and research (ongoing and proposed) as discussed in Section 1, Chapter 4.

**Comment E3:** Need an observer program.

**Response E3:** Comment noted (recommended in Environmental Section of MSFMP, Section 2).

Comment E4: Need larger sample sizes.

**Response E4:** The Department regularly evaluates sample sizes for variance.

**Comment E5:** The mortality estimates rely heavily on aging data, a technique which is questionable.

**Response E5:** Daily ring deposition has been validated for several squid species including some members of the family Loliginidae and has been shown to be an accurate method for ageing squid. The ageing technique currently used is being validated against alternate methods.

### 4.2.6 Option F. Live Bait Fishery and Incidental Catch of Market Squid

**Comment F1:** The Department should require live bait logs for squid.

**Response F1:** Although the actual amount of squid taken as live bait is unknown, bait logs would provide information about the impact of this industry on the resource and it is recommended that the current voluntary live bait logs be modified to include market squid. These logs will be evaluated to verify that squid remains a minor component of the live bait industry.

**Comment F2:** The Department should establish a permit for taking of squid as live bait.

**Response F2:** The volume of squid taken as live bait is small. Because it is an insignificant amount compared to the harvest, the Department recommends continuing the existing regulations that do not require a squid permit when fishing for live bait or when landing or taking market squid not to exceed two tons in any calendar day.

### 4.2.7 Option G. Squid Harvest Replenishment Areas

**Comment G1:** The Department needs to consider putting in harvest areas that protect seabirds as well as squid (i.e., Xantus's murrelets).

**Response G1:** The Department considered protecting seabird nesting habitat separately from harvest replenishment areas. The Department recommended closures to squid fishing using attracting lights from 1 February through 30 September to protect seabird rookeries from light pollution (see Option P).

**Comment G2:** Need to coincide plan with the MPAs already in place.

**Response G2:** The Department agrees (see Option G.1, Section 1). Further, the Department recommends continued evaluation and consideration of appropriate squid harvest replenishment areas, but within the other state and federal MPA processes in progress.

**Comment G3:** Need to consider northern areas (i.e. Big Sur and places north of San Francisco).

**Response G3:** The squid fishery does not regularly use these areas. Creating harvest replenishment areas not regularly used by fishers would not have any expected benefit to the squid resource, unless these areas are targeted in the future.

**Comment G4:** To sustain fishery from a socioeconomic view, need a buffer population of squid that stays off-limits to fishing.

**Response G4:** The Department believes that there are several refuges that serve as buffers for the market squid fishery. In October 2002, the Commission designated 12

new MPAs at the northern Channel Islands (three of which replace existing reserves at Anacapa, Santa Barbara and San Miguel islands). These areas include known commercial squid fishing sites at Santa Barbara, Anacapa, Santa Cruz, and Santa Rosa islands. In addition to the closures at the Northern Channel Islands, commercial fishermen are not allowed to fish in state designated ecological reserves using roundhaul nets. Several existing reserves are known to be market squid spawning sites (e.g., Carmel Bay Ecological Reserve, Point Lobos Ecological Reserve, northeast side of Santa Catalina Island and Santa Monica Bay); all serve as harvest replenishment (buffer) areas for market squid.

**Comment G5:** Reexamine MPA issues resulting from Department stakeholder meetings under MLMA.

**Responses G5:** Comment noted. The Department recommends continued evaluation and consideration of appropriate squid harvest replenishment areas, but within the other state and federal MPA processes in progress. Stakeholder meetings are essential in this process.

#### **Restricted Access - Limited Entry Program**

### 4.2.8 Option H. Market Squid Fleet Capacity Goal

**Comment H1:** Limited entry program needs to provide biological meaning.

**Response H1:** The limited entry program is not anticipated to have any unfavorable impact on the resource. The proposed project has a seasonal landings limit of 118,000 and monitoring the fishery through an egg escapement method. These management measures are designed to promote a sustainable fishery. A limited entry program combined with these management measures has social and economic impacts only and does not have any expected effects on the squid resource.

**Comment H2:** The Department should not ignore area north of Monterey as a potential area to develop a squid fishery; a no limited entry area should be developed north of Ano Nuevo and a small quota established.

Response H2: Comment noted.

**Comment H3:** Want to know how two squid committees and other participants feel about capacity goal.

**Response H3:** Comment noted. The capacity goal is consistent with the qualifying criteria selected by the Squid Fishery Advisory Committee.

### 4.2.9 Option I. Initial Issuance of Permits

**Comment I1:** Present the limited entry program in a table with options.

**Response I1:** The Department agrees and a matrix table is now presented in the plan (Tables 3-12, 3-13, 3-14, and 3-15, Section 1, Chapter 3)

**Comment I2:** Proposed limited entry program will end up in worse situation, it will result in bigger fleet.

**Response I2:** The Department reviewed the initial issuance criteria and the preferred option now brings the fleet closer to the capacity goal (142 initial issuance vs. 126 capacity goal permits) than the Preliminary Draft MSFMP.

**Comment 13:** There is no mechanism to insure fleet will ever reach stated goals.

**Response I3:** The transferability options (Option K-M) have mechanisms to bring the fleet within the stated capacity goal.

**Comment I4:** Limited entry sections provide no information on spatial distribution of effort or the fleet.

**Response I4:** The proposed project estimates potential loss of income spatially by port area (Table 3-17, Section 1, Chapter 3). Although most vessels have a homeport, the squid permit does not preclude them from fishing elsewhere. This is a common occurrence.

**Comment 15:** Qualifications required to get different permits are confusing.

**Response I5:** The sections regarding permit qualifications have been rewritten for clarity (Options I.1 through I.5).

**Comment I6:** Is it a matter of policy for the Department to use historical participation as an important factor for the limited entry qualifying criteria?

**Response I6:** California has had a practice of giving preference to vessels of fishermen with past participation when issuing restricted access permits. Among fishermen or vessels with past participation in the squid fishery, preference for permits may be based on factors such as years of participation in the fishery or participation level (landings). The qualifying criteria for the market squid permit use landings as opposed to tonnage that is more equitable to the northern fishery, which generally lands significantly a smaller portion of the statewide harvest.

**Comment I7:** The Department needs to decide which type of fishing to support: either longstanding squid fishing communities or newer members of the squid fishery.

**Response I7:** The proposed limited entry program recommends using landings from 01 January 1990 to 12 November 1999, indicating consideration for historical landings. The criterion to possess a current market squid permit demonstrates intent to participate in the fishery in the future through purchase of a moratorium permit.

Comment 18: Would like limited entry to allow fishing north of 39 degrees.

**Response I8:** Landings data indicate that there is minimal effort in this area and the fisher in the area does not qualify for a permit. Because the proposed plan has a transferability of permits, the Department recommends that this fisher pursue this avenue.

**Comment 19:** Needs to state in grandfather clause that that permit will go to fisherman who owned vessel when landings were made.

**Response 19:** Regulations that accompany the MSFMP (Section 3) address this issue.

**Comment I10:** Supports non-transferable grandfather permits as long as it allows fleet to eventually reach stated goal.

Response I10: Comment noted.

**Comment I11:** Grandfather clause needs to be adjusted so that substantial historical participation is used as criterion.

**Response I11:** The proposed project requires 33 landings in one season which sharply limits the number of grandfather permits issued.

**Comment I12:** Preferred option for initial issuance needs to be equal to capacity goal.

**Response I12:** The Department presented a matrix to the Commission with alternatives for selecting initial issuance criteria and included initial issuance equal to the capacity goal. However, because the proposed project has a mechanism for reducing the number of permits and it is estimated that 24 permits will be issued over the capacity goal, the Department does not recommend this option for the MSFMP.

**Comment I13:** Need a capacity goal of 60-62 vessels to support processors.

**Response I13:** Comment noted and presented as an alternative.

**Comment I14:** Need to allow fewer boats in – would result in better squid quality and prices.

**Response I14:** Comment noted and presented as an alternative.

**Comment I15:** Need fewer boats allowed in the fishery and current close date allows too many boats in. Should use historical data and go back to 1995.

**Response I15:** The Department has provided several alternatives to the Commission regarding the number of vessels to allow in the fishery. Further, calculations using historical data back to 1995 did very little to change the proposed projects composition of the fleet.

**Comment I16:** Need fewer boats in Monterey Bay, suggests using regional permit system.

**Response I16:** Comment noted. At this time, a regional permit system has not been proposed by the Department because of the fluctuations in market squid availability.

**Comment I17:** Catcher vessel capacity arguments are flawed.

**Response I17:** Comment noted. See Section 1, Appendix C for capacity goal calculations.

**Comment I18:** Light boat capacity does not make sense because relationships are much more complex.

**Response I18:** Although the relationships may be more complex, this is the observed ratio (one light boat to one seiner) during the last four years (Maxwell, et al. *in press*).

**Comment I19:** Brail vessel capacity goal is not supported.

**Response I19:** The proposed project supports a brail fleet capacity goal of 18 vessels, which is larger than the current fleet of approximately 13 vessels. Although this capacity goal is larger than the currently active fleet size, it provides adequate insurance against unlimited expansion of this component of the fishery. Further, the Department would like to maintain this historical fishery operation.

**Comment I20:** Need option to set fleet at higher number of vessels with options that will reduce fleet size within reasonable amount of time.

**Response I20:** The Department has provided several alternatives to the Commission regarding the number of vessels to allow in the fishery, including a higher number of vessels. Because it is difficult to reduce fleet size within a short period, the Department did not recommend these options.

**Comment I21:** Need to strengthen mechanisms to reach capacity goal.

**Response I21:** An additional mechanism was added for fishers trying to gain entry into the fishery (Two permits are required to enter the fishery).

**Comment I22:** Increasing brail activity may increase amount and duration of light use.

**Response I22:** Comment noted. Gear restrictions (Option O) and area closures to protect nesting seabirds (Option P) should prevent negative impacts.

**Comment I23:** Every purse seine owner should have ability to use own light boat because light boat is a tender vessel.

Response I23: Comment noted.

**Comment I24:** No information is provided on the size of the smaller boats that would be included in the limited entry fleet

Response 124: Fleet capacity information is provided in Section 1, Appendix C.

**Comment I25:** Preferred plan may put fulltime fishers at severe economic disadvantage.

**Response I25:** The Restricted Access Program has a capacity goal for market squid vessel permits that produces a moderately productive and specialized fleet, which is similar to the current characteristics of the fleet. Squid is seasonal and fishers target other species during off-periods.

**Comment 126:** Need to revise socio-economic analysis to include 74 +grandfathered vessels.

**Response I26:** The number of vessels that have the potential to grandfather into the first year of the limited entry program is unknown. The analysis provided is the maximum economic impact to the fishing community.

**Comment I27:** Need to use limited entry program as method to provide economic stability.

**Response I27:** The restricted access program should provide economic stability for the squid fishing fleet.

**Comment I28:** If catch limit is too high, then the economic feasibility of the limited entry program is inflated.

**Response I28:** Comment noted. The Department believes that the statewide catch limit in the proposed project provides for a sustainable harvest.

### 4.2.10 Option J. Permit Fees

**Comment J1:** Fee needs to be associated with research and monitoring sections.

**Response J1:** The Department agrees and has presented the options for permit fees in a table with projected expenses.

**Comment J2**: Fee should be correlated to program costs (big fleet = lower fee, small fleet = larger fee).

**Response J2:** The Department has presented the options for permit fees in a table with projected expenses for their proposed project fleet size. If an alternate fleet size is selected, an alternate fee should be evaluated.

Comment J3: The \$2500 fee is a mistake.

Response J3: Comment noted.

**Comment J4:** Majority of fee should be put in dedicated account to squid management and research.

**Response J4:** Comment noted. Costs projected to manage the squid fishery are less than the projected fees.

**Comment J5:** The \$2500 fee is not equitable among users; should add surcharge according to amount harvested.

Response J5: Comment noted.

**Comment J6:** Money from daily trip overages should be used to offset permit charges to squid fishery.

**Response J6:** Comment noted. The Department chose not to recommend daily trip limits in the proposed project.

#### 4.2.11 Options K-N. Market Squid Permit Transferability and Transfer Fee

**Comment K1:** Permit transfer thresholds need to be fully justified and may have negative distributional consequences for small vessel owners.

**Response K1:** The permit transfer mechanisms in the proposed project have been altered so that vessel size increase greater than 10% requires only one additional permit (same requirements as in CPS FMP).

**Comment K2:** Would like to know how squid committees and participants feel about "2 for 1" and "3 for 1" permit retirement programs.

**Response K2:** Comment noted. The "3 for 1" permit option has been deleted from the MSFMP.

#### 4.2.12 Option O. Lighting Gear Restrictions

**Comment O1:** Squid vessels should not use lights in Monterey because even shielded lights are visible one mile off shore at a height of 500'.

Response O1: Comment noted.

**Comment O2:** Need to set funds aside and evaluate use of shield and reduced wattage.

Response O2: Comment noted.

**Comment O3:** Need quantitative analysis of night lighting.

Response O3: Comment noted.

**Comment O4:** What about other gear options (such as underwater lights)?

**Response O4:** The shielding and wattage regulations do not restrict the use of underwater lights.

**Comment O5:** Need better rationale for current light limitation.

Response **O5**: Comment noted.

**Comment O6:** Need to evaluate the socio-economic impacts of gear restrictions.

**Response O6:** Gear restrictions went into effect 30 May 2000. The 2000-2001 fishing season was the third highest season on record. The gear restrictions appear to have no effect on harvest.

**Comment O7:** Gear restrictions need to include setting a maximum diameter of 1" for purse and leaded lines to protect bottom habitats especially egg cases.

**Response O7:** Comment noted and proposed as future research.

#### 4.2.13 Option P. Area and Time Closures to Address Seabird Issue

**Comment P1:** Need to study and evaluate light pollution effects on seabird populations; specifically, Snowy Plovers on Santa Rosa Island and Ashy Storm-petrels on Santa Cruz Island. Need to address impacts on Santa Cruz Island juvenile Bald Eagle population, Santa Rosa Island Western Snowy Plovers, and all sensitive seabird colonies on Catalina Island. Recommend minimum January to October closure within one mile of all nesting habitats at Santa Barbara and Anacapa Islands for protection of Brown Pelican colonies.

**Response P1:** Comment noted. Evaluation recommended in the Environmental Document, Section 2. The Proposed Project includes a one-mile closure to the use of squid attracting lights from 1 February to 30 September at Santa Barbara and Anacapa islands to protect nesting seabird species (Option P.4).

**Comment P2:** Preferred option needs to be specified, analyzed, and justified.

**Response P2:** Preferred option has been specified and analyzed in the MSFMP (Section 1, Chapter 3, Option P4) and in the Environmental Document, Section 2.

**Comment P3:** Recommend closure within one mile of all seabird colonies and nesting habitats.

**Response P3:** The Proposed Project includes a one-mile closure to the use of squid attracting lights from 1 February to 30 September at Santa Barbara and Anacapa Islands to protect nesting seabird species (Option P.4).

**Comment P4:** Need scientifically sound monitoring program to quantify effects of lights and noise on bird species.

**Response P4:** Comment noted. Evaluation recommended in the Environmental Document, Section 2.

### 4.2.14 Option Q. Advisory Committee for Squid Fishery

**Comment Q1:** Need to clarify role of advisory committee.

**Response Q1:** The advisory committee would be responsible for reviewing the limited entry program and other management measures implemented for the fishery as well as to evaluate the status of the resource. Further, this committee would be responsible for preparing a report to the Department on the effectiveness of the current management plan, as well as serve as a direct correspondence to the entire market squid industry.

**Comment Q2:** Need to consider indirect socioeconomic effects of no committee option.

**Response Q2:** Comment noted. The option not to establish an advisory committee for the squid fishery (Option Q.3) would likely have indirect impacts on the social and economic fishery community activities, but these are not expected to be significant.

**Comment Q3:** Need to include members of the general public in committee.

ResponseQ3: Comment noted.

**Comment Q4:** Need to include members of conservation community in committee.

**Response Q4:** The Department recommends establishing a single squid fishery advisory committee comprising industry, science, and environmental community members of no more than 12 individuals.

**Comment Q5:** The proposed option may not provide enough expertise.

Response Q5: Comment noted.

**Comment Q6:** Need to publish and disseminate meeting minutes.

Response Q6: Comment noted.

**Comment Q7:** Need to have supporting analysis that advisory committee will not have socioeconomic effects.

**Response Q7:** The option not to establish an advisory committee for the squid fishery (Option Q.3) would likely have indirect impacts on the social and economic fishery community activities, but are not expected to be significant.

**Comment Q8:** There are three species of cormorants that breed at the Channel Islands not mentioned in the seabird section including a species of special concern.

**Response Q8:** These species are discussed in this draft.

**Comment Q9:** The management plan identifies the breeding period for the California Brown Pelican from March through August. This species breeds from February through September, although breeding can start as early as January and extend through October.

**Response Q9:** Comment noted. The alternatives for this option were changed to reflect the February through September period.

**Comment Q10:** Continuous exposure to light alters endocrine levels; this should be considered as a factor in lowered productivity levels.

**Response Q10:** The Proposed Project includes a one-mile closure to the use of squid attracting lights from 1 February to 30 September at Santa Barbara and Anacapa Islands to protect nesting seabird species (Option P.4).

**Comment Q11:** The shielding and wattage restrictions are not of much value to the birds and were only a "band-aid" type approach.

**Response Q11:** The Proposed Project includes a one-mile closure to the use of squid attracting lights from 1 February to 30 September at Santa Barbara and Anacapa Islands to protect nesting seabird species (Option P.4).